Dredged Material Management Plan

Kick Off

Disposal History, Existing Disposal Areas

13 April 2005

AUTHORIZATION

The project was authorized by the Rivers and Harbor Act of 1968

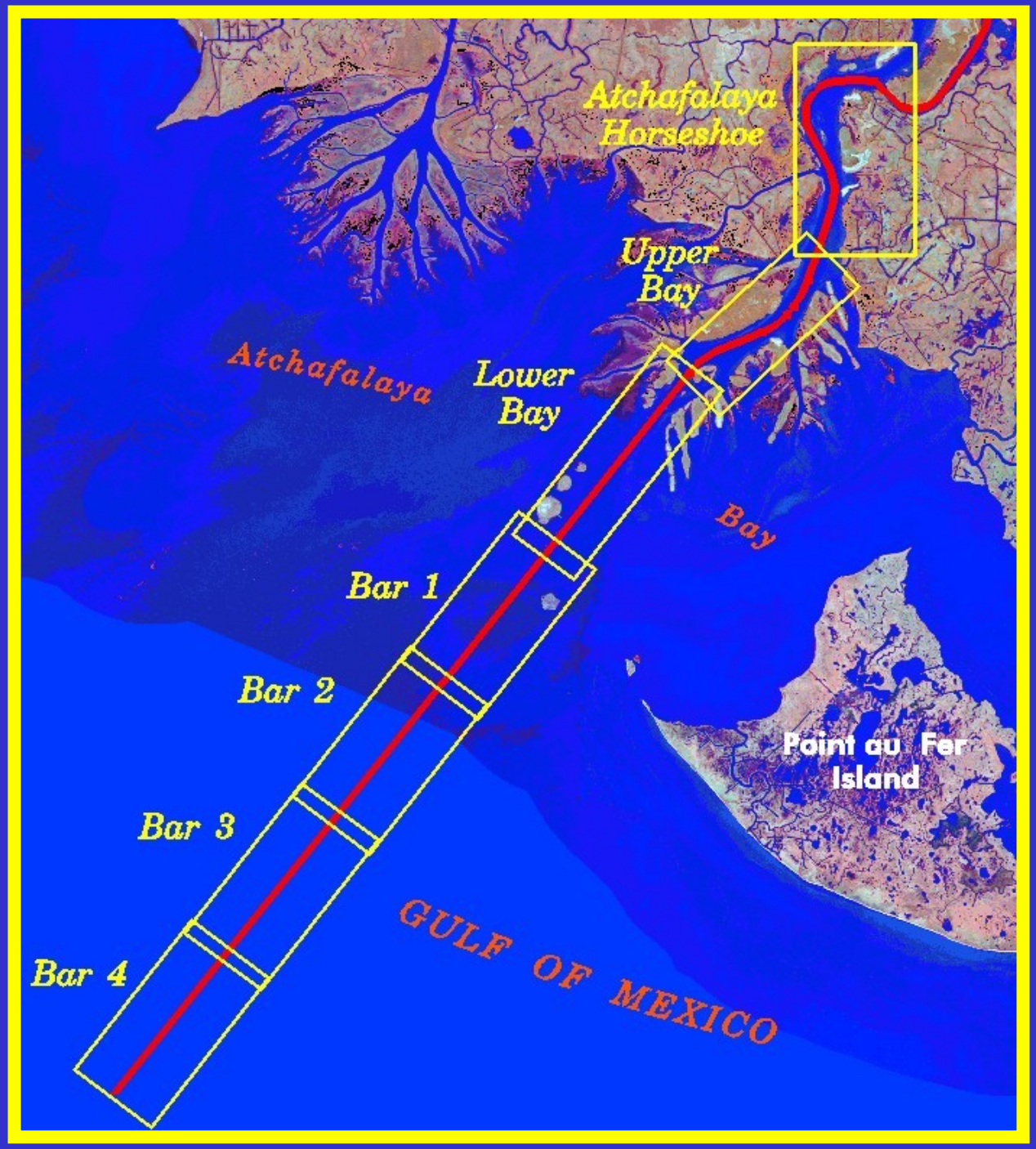
DESCRIPTION

The Atchafalaya River and Bayous Chene, Boeuf and Black, Louisiana Project, provides a 20-ft by 400-foot channel between the Gulf of Mexico and rig fabrication and oil service facilities in the Amelia area east of Morgan City

PURPOSE

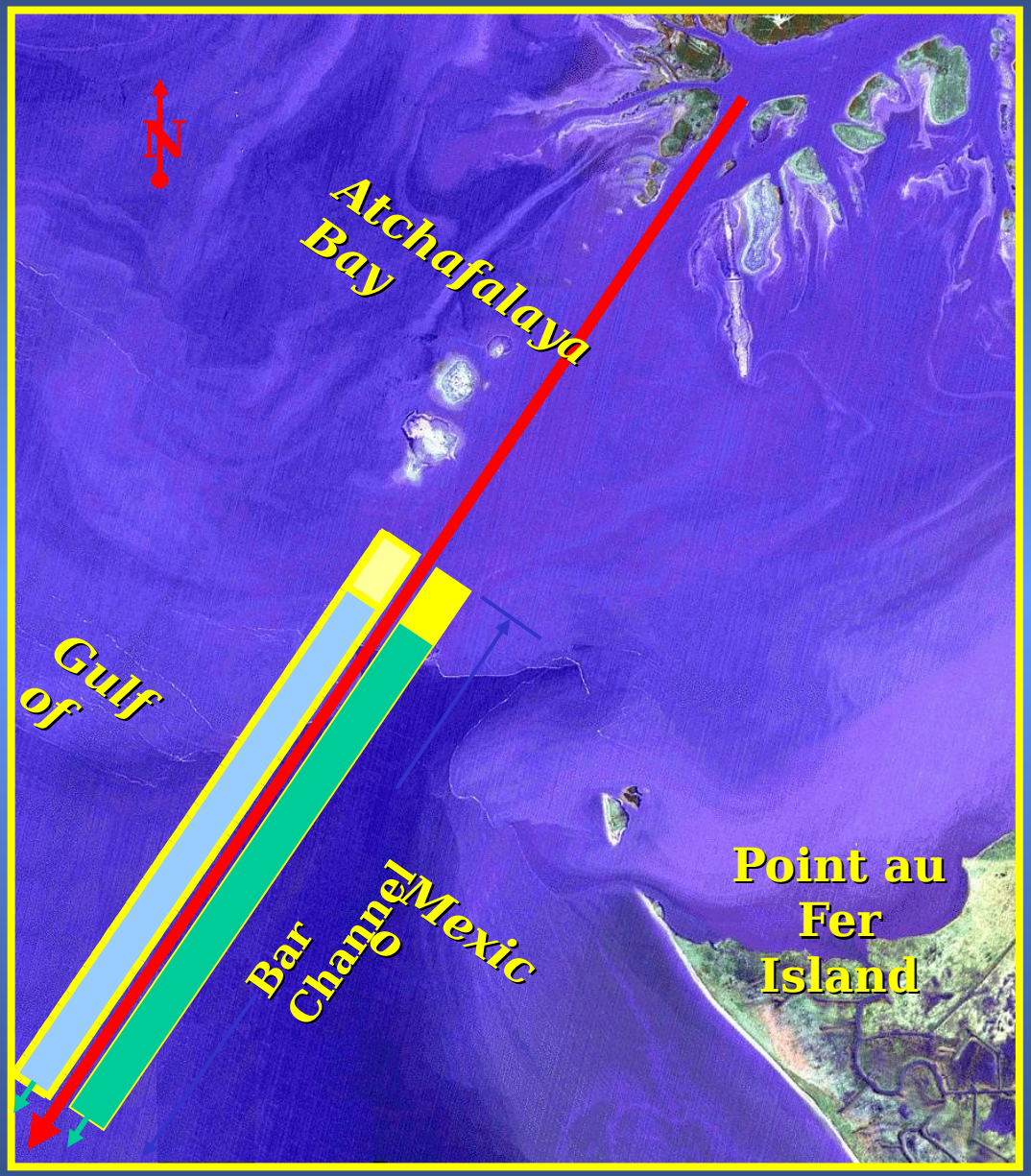
To provide an adequate navigation outlet for the major marine fabrication and repair facilities which build mobile offshore petroleum drilling rigs, and to provide shelters of refuge, for those rigs and related floating equipment from Gulf Storms and Hurricanes

Atchafalaya River Bayous Chene, Boeuf & Black



BAR CHANNEL REACH

Lower Atchafalaya River Bar Channel



Navigational Channel

ODMDS - East

Bird Island - East

ODMDS - West

Bird Island - West

ATCHAFALAYA RIVER BAR CHANNEL			
FISCAL YEAR	CUBIC YARDS	DOLLARS	PRICE / CY
FY 1995	11,751,372	$3,415,826	$0.29
FY 1996	10,840,790	$3,520,347	$0.32
FY 1997	10,350,055	$3,744,000	$0.36
FY 1998	5,261,820	$2,248,000	$0.43
FY 1999	14,372,841	$5,416,934	$0.38
FY 2000	13,847,232	$7,661,766	$0.55
FY 2001	12,509,028	$6,505,238	$0.52
FY 2002	13,902,959	$6,652,497	$0.48
FY 2003	10,452,078	$9,499,637	$0.91
FY 2004	15,656,062	$11,063,172	$0.71
FY 2005 *		$12,496,000	

*** Contract is ongoing. Do not have an actual cubic yardage to report yet. The cost is based on the Contractor's bid amount.**

Bar Channel Reach

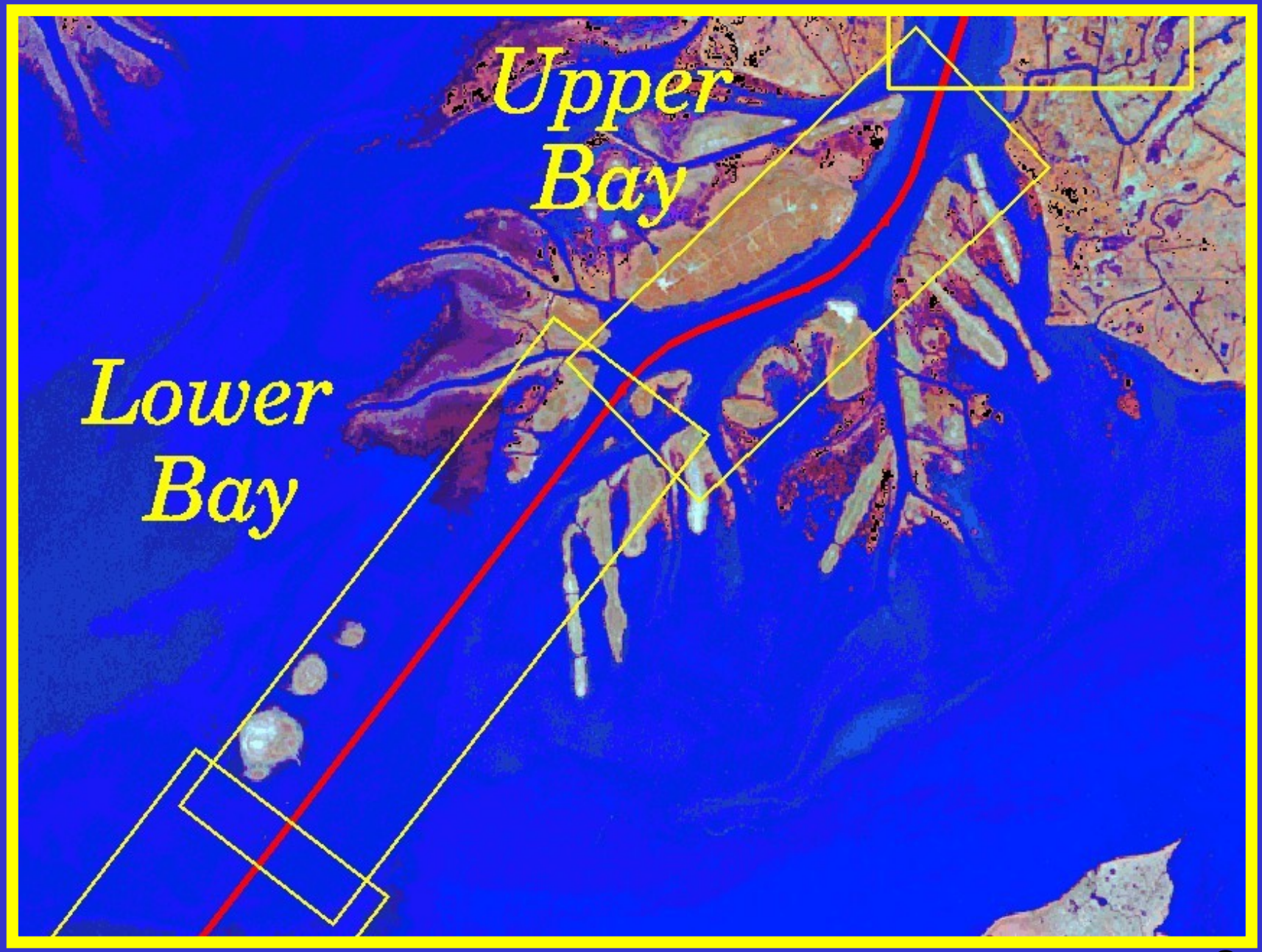
Dredging Frequency- Annually or biannually if funding available

Type of Dredge- Cutterhead, have tried a demonstration with a Hopper Dredge removed material but did not prolong period for fluff to return to the channel

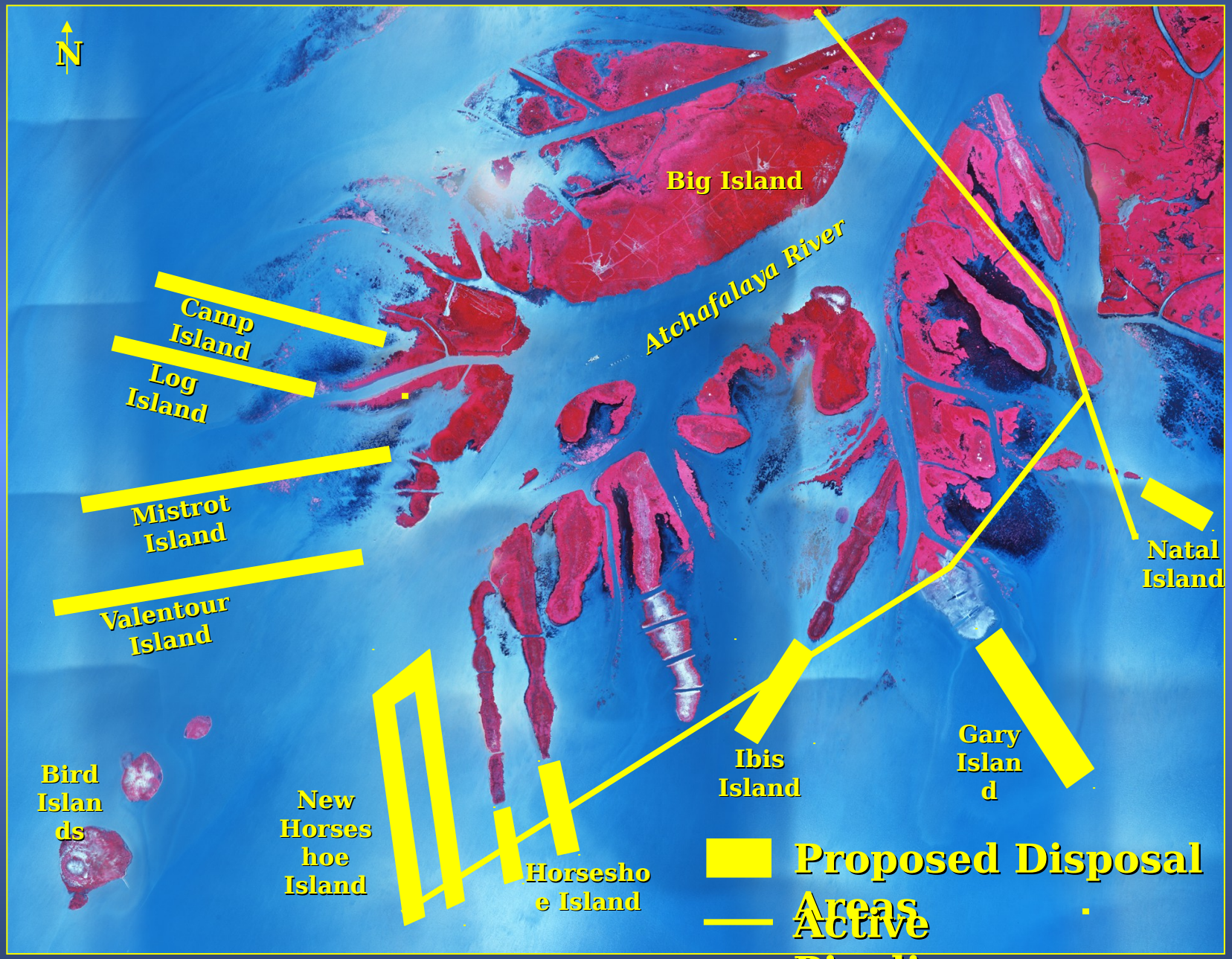
Quantities- 10,000,000 to 15,000,000

Disposal Sites unconfined, dispersive, no issues for disposal capacity

A portion of the material removed is fluff, fluid mud unconsolidated fine grain material. Fluff returns or reappears in the channel within weeks following dredging


Upper
Bay
Lower
Bay

Lower Atchafalaya River - Bay



ATCHAFALAYA RIVER BAY CHANNEL			
FISCAL YEAR	CUBIC YARDS	DOLLARS	PRICE / CUBIC YARD
FY 1995	944,620	$1,254,000	$1.33
FY 1996	Not Dredged		
FY 1997	2,000,000	$4,286,000	$2.14
FY 1998	1,495,263	$472,000	$0.32
FY 1999	616,377	$1,272,911	$2.07
FY 2000	Not Dredged		
FY 2001	1,047,536	$3,601,254	$3.44
FY 2002	724,313	$1,807,827	$2.50
FY 2003	Not Dredged		
FY 2004	708,412	$577,914	$0.82
FY 2005 *			

*** To date, no dredging has been performed in the Bay Channel during FY 2005.**

Bay Channel Reach

Dredging Frequency Annual or every other year

Type of Dredge- Cutterhead dredge

Quantities 500,00- 1,000,000 cubic yards

Disposal Sites Unconfined for wetlands development located within environmental sensitive area, significant pumping distances (32,000 feet or greater)

Possible issues if additional confined or semi-confined disposal areas are identified

Possible issues if training dikes are used to direct material

Coastal Restoration projects competing for

Atchafalaya
Horseshoe

Lower Atchafalaya River

Horseshoe Reach

Disposal Areas

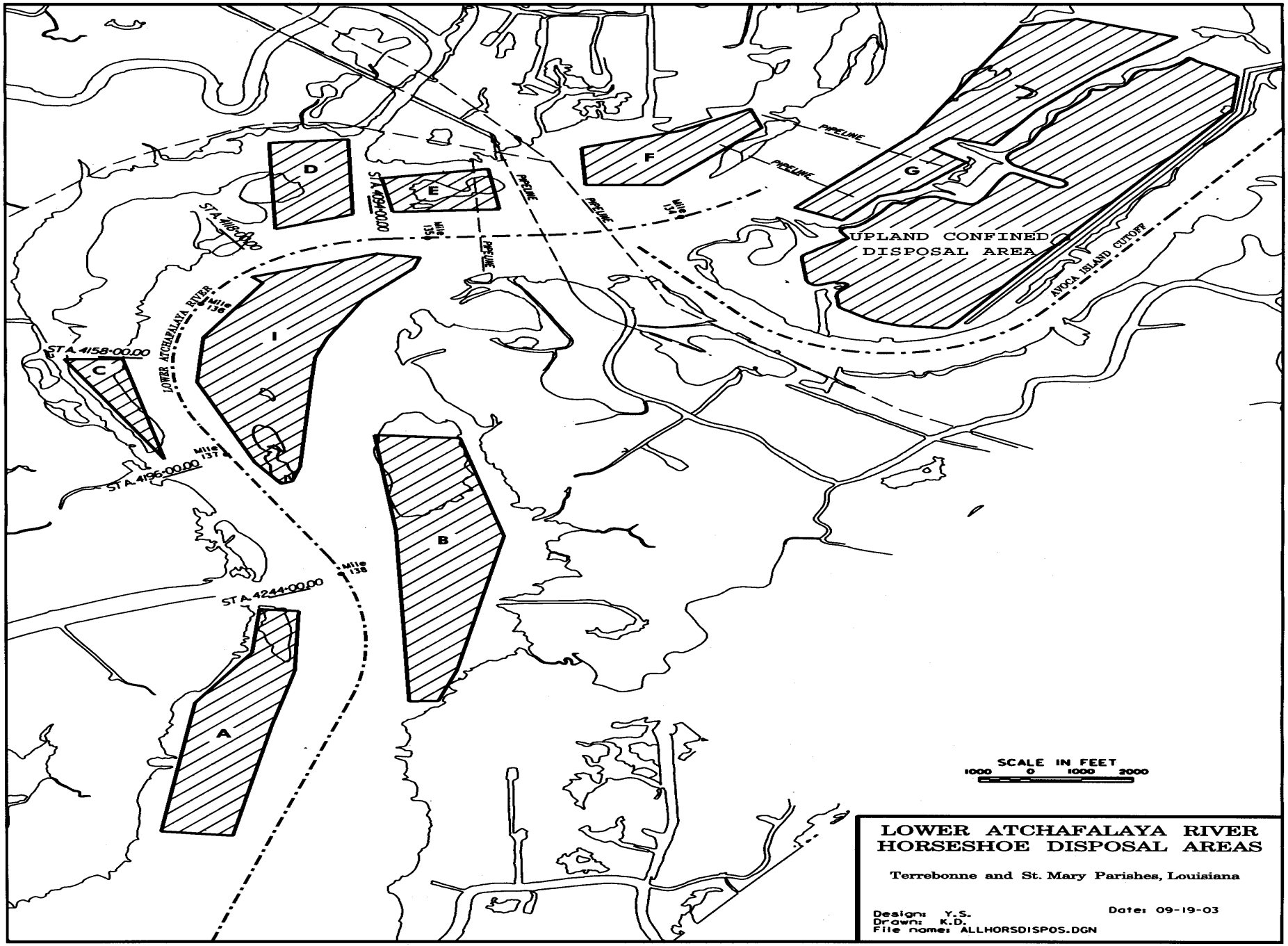

A
B
C
D
E
F
G
I
PIPELINE
PIPELINE
PIPELINE
PIPELINE
UPLAND CONFINED
DISPOSAL AREA
AVOCA ISLAND CUTOFF
LOWER ATCHAFALAYA RIVER
MILE 139
MILE 138
MILE 137
MILE 135
MILE 134
STA 4158+00.00
STA 4196+00.00
STA 4244+00.00
STA 4184+00.00
STA 4158+00.00
SCALE IN FEET
1000 0 1000 2000
LOWER ATCHAFALAYA RIVER
HORSESHOE DISPOSAL AREAS
Terrebonne and St. Mary Parishes, Louisiana
Design: Y.S.
Drawn: K.D.
File name: ALLHORSDISPOS.DGN
Date: 09-19-03

Figure 2

ATCHAFALAYA RIVER HORSESHOE			
FISCAL YEAR	CUBIC YARDS	DOLLARS	PRICE / CUBIC YARD
FY 1995	1,392,376	$1,460,000	$1.05
FY 1996	1,502,305	$2,857,063	$1.90
FY 1997	1,117,411	$4,286,000	$3.84
FY 1998	932,649	$2,110,184	$2.62
FY 1999	528,769	$1,695,825	$3.21
FY 2000	616,377	$1,272,911	$2.07
FY 2001	Not Dredged		
FY 2002	1,108,048	$2,711,741	$2.45
FY 2003	1,260,918	$4,501,525	$3. 57
FY 2004	Not Dredged		
FY 2005 *			

*** To date, no dredging has been performed in the Horseshoe during FY 2005.**

Horseshoe Reach

Dredging Frequency- Annually, but only required after FY 1990

Type of Dredge- Cutterhead

Quantities 1,000,000 annually

Disposal Sites unconfined but sites almost 100% filled

H & H investigating Open Water Disposal top of Shell Island Pass, other open water disposal in channel, open water disposal in Breaux's (NMFS) cut in bay

Investigated pumping material to Bay following Bay Channel disposal technique seem feasible higher costs.

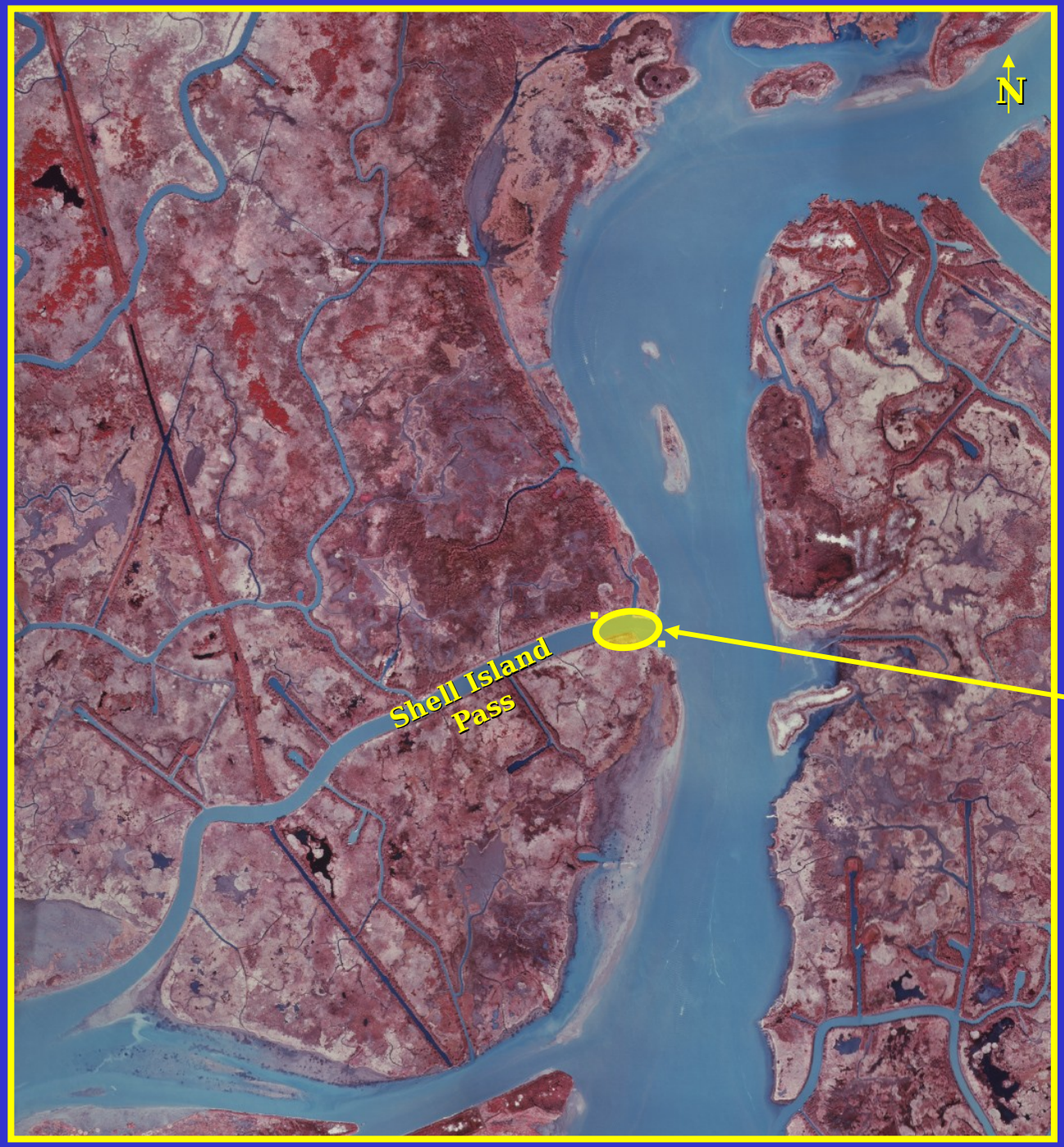
Issues Horseshoe Disposal Areas

Significant- Running out of capacity

May have to move to dike construction on existing disposal areas to expand capacity on currently unconfined disposal areas,

May have to move to dike construction on existing confined disposal areas on the Avoca Island Cutoff to expand capacity

May have to construct new disposal areas

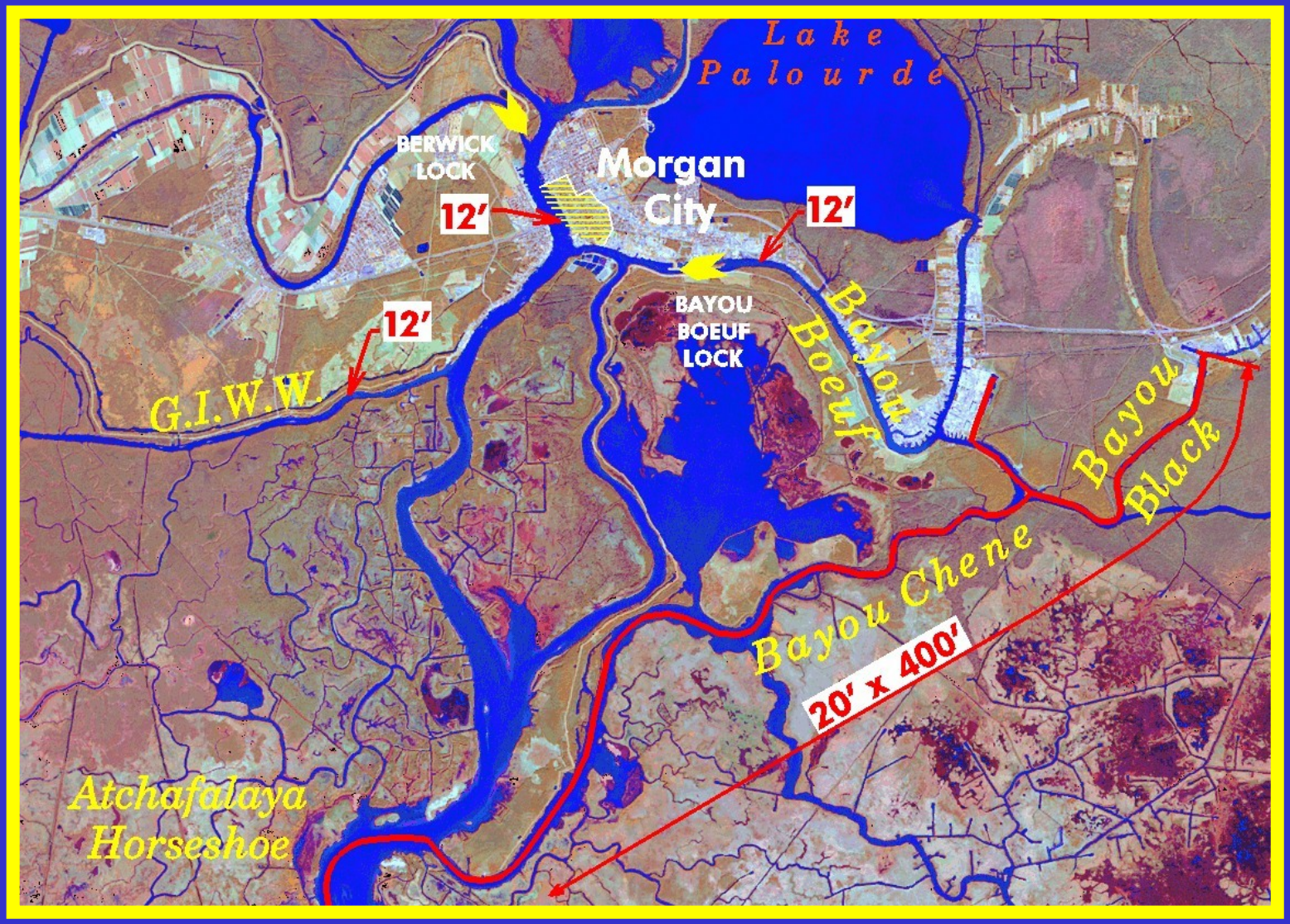


Lower Atchafalaya River

Horseshoe Reach

Shell Island Pass

Proposed Open Water Disposal Area



Bayous Chene, Boeuf, and Black

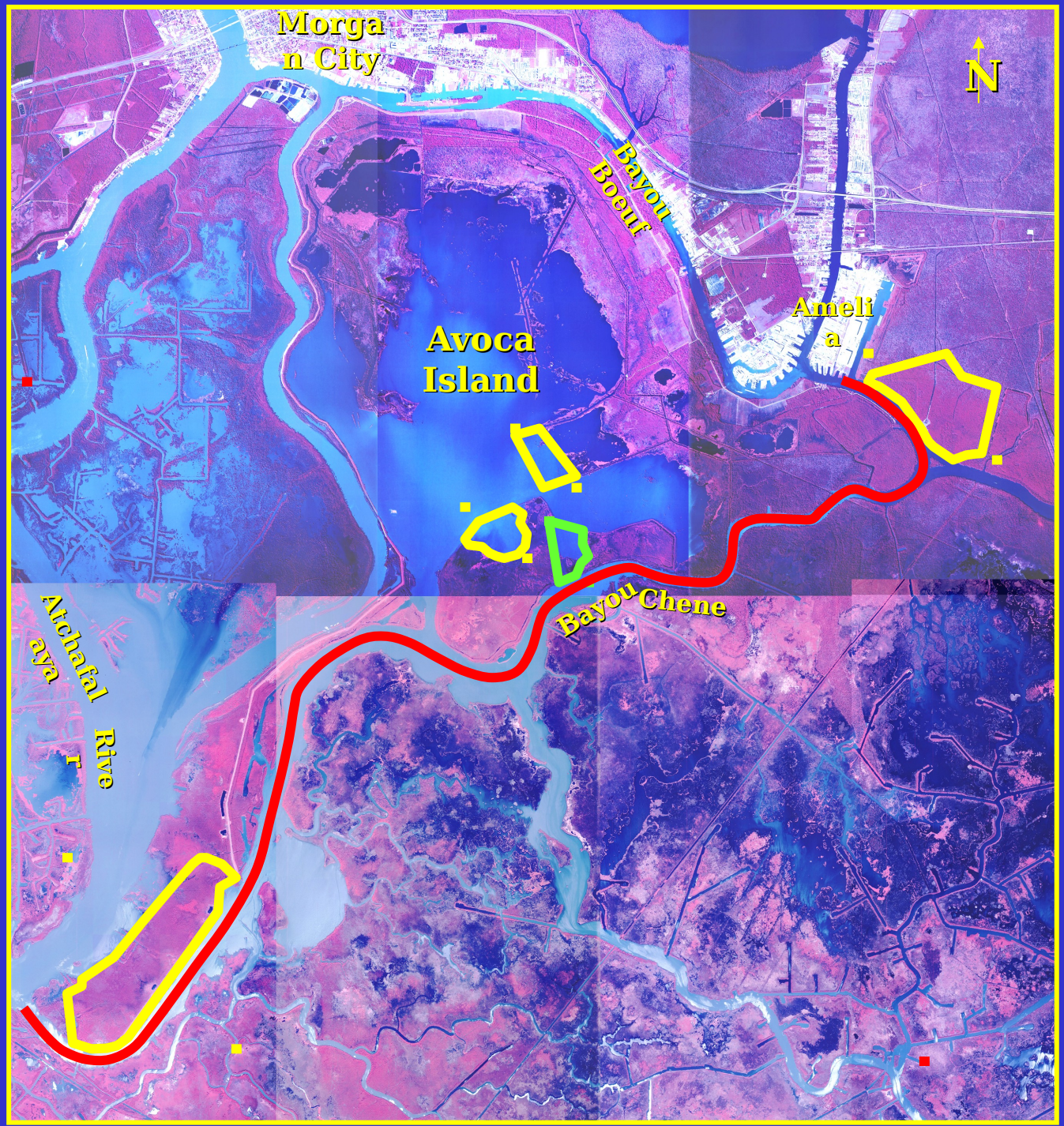
Bayou Chene Reach

Dredging Frequency - 5 to 10 years

Type of Dredge- Cutterhead dredge

Quantities- 3,000,000-4,000,000

Disposal Sites- Confined beneficial use and non-beneficial use sites, proposed new beneficial use disposal sites in Avoca Lake (construction of new dikes for disposal area requires cost sharing)



Lower Atchafalaya River

Bayous Chene & Boeuf Maintenance Dredging

- Dredging Limits
- 2003/2005 Upland Confined Disposal Area
- 2003 Wetlands Development Disposal Area
- 2005 Wetlands Development Disposal

Avoca
Lake
2003
Placeme
nt Areas
2
5
Bayou
Chene

Bayou Chene- Avoca Lake:

Disposal Area #2:

517,943 cubic yards

After Disposal
2.0 ft to 4.5 ft-MLG Elev

Disposal Area #5:

494,238 cubic yards

After Disposal
2.5 ft to 4.0 ft-MLG Elev

Issues Bayou Chene (Avoca Island Cutoff) and Bayou Boeuf Disposal

Constructing new disposal areas in Avoca Lake, these disposal areas are dikes. Requires cost sharing

Old Disposal areas in Avoca Lake have reached or are close to reaching capacity Land owner prefers construction of new disposal areas to use of old disposal areas

Other Issues

1. Concerns about the placement of material into in the channel affecting flood control capacity (Specifically material placed back in the channel in Horseshoe because it may contribute to fluff formation or down Shell Island Pass because it may affect flood control capacity)

2. Federal Standard- Corps Policy of Selecting the least costly, environmentally acceptable alternative for disposal, considers Endanger Species Act, Fish and Wildlife Coordination Act environmentally acceptable is not necessarily restoration alternative.

3. Continued increasing costs of dredging when overall maintenance budget has flattened out, during process try to look for cheaper disposal alternates.